

WHAT IS CLAIMED IS:

1. A method for reversing drug resistance in a cancer cell, said method comprising introducing an antisense glucosylceramide synthase compound into said cell, wherein said introduction reverses drug resistance in said cell.
2. The method of claim 1 wherein said antisense glucosylceramide synthase compound comprises a nucleic acid sequence.
3. The method of claim 2, wherein said nucleic acid sequence is complementary to all or part of a sense strand for glucosylceramide synthase.
4. The method of claim 3, wherein said nucleic acid sequence is between about 15 to about 25 nucleotides in length.
5. The method of claim 1 wherein said cancer cell is selected from the group consisting of a breast cancer cell, prostate cancer cell, ovarian cancer cell, lymphoma cell, melanoma cell, sarcoma cell, leukemia cell, retinoblastoma cell, hepatoma cell, myeloma cell, glioma cell, mesothelioma cell or carcinoma cell.
6. The method of claim 1, further comprising the step of contacting said cell with at least one other agent.
7. The method of claim 6 wherein said agent is a chemosensitizer or chemotherapeutic agent.
8. A method of inducing apoptosis in a cancer cell, said method comprising introducing an antisense glucosylceramide synthase compound into said cancer cell, wherein said introduction induces apoptosis in said cells.
9. The method of claim 7 wherein said antisense glucosylceramide synthase compound comprises a nucleic acid sequence.
10. The method of claim 9, wherein said nucleic acid sequences are complementary to all or part of a sense strand for glucosylceramide synthase.
11. The method of claim 10, wherein said nucleic acid sequence is between about 15 to about 25 nucleotides in length.
12. The method of claim 8 wherein said cancer cell is selected from the group consisting of a breast cancer cell, prostate cancer cell, ovarian cancer cell, lymphoma cell,

melanoma cell, sarcoma cell, leukemia cell, retinoblastoma cell, hepatoma cell, myeloma cell, glioma cell, mesothelioma cell or carcinoma cell.

13. The method of claim 8, further comprising the step of contacting said cell with at least one other agent.

14. The method of claim 13 wherein said agent is a chemosensitizer or chemotherapeutic agent.

sub 15 15. A formulation for reversing drug resistance in a cancer cell or inducing apoptosis in a cancer cell, comprising an antisense glucosylceramide synthase compound and chemosensitizer or chemotherapeutic agent.

16. The formulation of claim 15 wherein said antisense glucosylceramide synthase compound comprises a nucleic acid sequence.

sub 16 17. The formulation of claim 16 wherein said nucleic acid sequence is complementary to all or part of a sense strand for glucosylceramide synthase.

18. The formulation of claim 17, wherein said nucleic acid sequence is between about 15 to about 25 nucleotides in length.

19. A kit comprising the formulation of claim 15.

20. The kit of claim 19, wherein said antisense glucosylceramide synthase compound comprising said formulation is a nucleic acid sequence.

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